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Applicant: Anil V. Rao, Wayne R. Weilnau
Assignee: Dell USA L.P.
Title: System and Method for Installing System Manufacturer Provided Software
Serial No.: 09/271,581 Filed: March 18, 1999
Examiner: Benjamin E. Lanier Group Art Unit: 2132
Docket No.: DC-01492 Customer No.: 33438

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APPEAL BRIEF UNDER 37 CFR § 1.191

Dear Sir:

Applicants submit this Appeal Brief pursuant to the Notice of Appeal filed in this case on March 25, 2004.

Applicants respectfully petition for a two (2) month extension of time within which to file this Appeal Brief, such extension allowing the undersigned until July 25, 2004. The extension fee of \$420.00 is enclosed herewith.

The Appeal Brief fee in the amount of \$330.00 is enclosed herewith, being the amount specified in 37 C.F.R. 1.17(c) for this Appeal Brief. The Commissioner is also authorized to deduct any other amounts required for this appeal brief and to credit any amounts overpaid to Deposit Account No. 502264. This paper is submitted in triplicate.

I. REAL PARTY IN INTEREST

The real party in interest is the assignee, Dell USA L.P., as named in the caption above.

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II. RELATED APPEALS AND INTERFERENCES

Based on information and belief, there are no appeals or interferences that could directly affect or be directly affected by or have a bearing on the decision by the Board of Patent Appeals in the pending appeal.

III. STATUS OF CLAIMS

Claims 1 – 28 are pending in the application. Claims 1 – 28 have been rejected. Claims 1 – 28 are appealed. Appendix “A” contains the full set of pending claims.

IV. STATUS OF AMENDMENTS

No amendments have been filed subsequent to final rejection.

V. SUMMARY OF THE INVENTION

The present invention selectively installs software onto a customer's computer system 110 based upon computer system specific information. The computer specific information is included in one or more configuration files. In a Windows™ environment, the configuration files include a BIOS/DOS memory file. Software to be installed is encrypted and stored on a nonvolatile storage medium that may be a CD-ROM, a floppy disk, a fixed disk, or accessed through a Web Page over the Internet. The configuration file is read to locate the computer system specific information and build an encrypted key for deciphering the encrypted software (235). The encrypted software is deciphered 270 and stored on the user's computer 760 (i.e., on the user's fixed disk drive) where it will be operable by the user. Because many software products include many individual software files, the encryption key is stored in a system registry 260 where it is repeatedly retrieved by a setup program performing the deciphering and installing. (See generally Figure 2 and Page 7, Line 5 – Page 9, Line 8)

VI. ISSUE

Are claims 1, 10 and 23 allowable over Kubota, U.S. Patent No. 5,034,980 (Kubota)?

Are claims 18, 20 and 22 allowable over Kubota in view of Patterson, U.S. Patent No. 6,389,541 (Patterson)?

VII. GROUPING OF THE CLAIMS

For the purposes of this appeal, claims 1 – 9 and 24 may be grouped together, claims 10 – 17 and 25 may be grouped together, 18 – 19 and 26 may be grouped together, 20, 21 and 27 may be grouped together, 22 and 28 may be grouped together and 23 may be grouped together.

VIII. ARGUMENTS

Claims 1, 10 and 23 are allowable over Kubota

Independent claims 1, 10 and 23 stand rejected under 35 U.S.C. 102(b) as being anticipated by Kubota.

In the Final Office Action, the examiner sets forth:

Claims 1, 5, 10, 13, 23-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Kubota, U.S. Patent No. 5,034,980. Referring to claims 1, 5, 10, 13 Kubota discloses a system for providing copy protection wherein a microprocessor is encrypted with a unique code (configuration file) during its manufacture (manufactured by a computer system manufacturer, identifying the computer system manufacturer). A software package is encrypted to function uniquely with a particular microprocessor such that only the unique cryptographic code in the microprocessor (identification information) can decipher it (read configuration file, ensure that the software is installed only on a computer system manufactured by the computer system manufacturer) (Abstract, Col. 2, lines 1 – 45). Microprocessor also has means to store software information on floppy disks and hard disks (non-volatile storage) (Col. 1, lines 15 – 63). (Final Office Action, Page 3).

The present invention, as set forth by independent claim 1, relates to a method of selectively installing software onto a *computer system* manufactured by a *computer system manufacturer* the method includes reading a configuration file that contains computer system information including *manufacturer specific identification information identifying the computer system manufacturer*, determining an encrypted key from one or more bytes from the *configuration file, including the manufacturer specific information*, and deciphering data stored

on a nonvolatile storage device using the key so as to ensure that *the software is installed only on a computer system manufactured by the computer system manufacturer.*

The present invention, as set forth by independent claim 10, relates to a *computer system for selectively installing software.* The computer system is *manufactured by a computer system manufacturer* and includes a processor, nonvolatile memory operatively coupled to the processor, a nonvolatile storage device, one or more configuration files, and a computer program executable by the processor. The computer program is capable of reading a configuration file stored in the nonvolatile memory and determining an encrypted key from one or more bytes read from the configuration file. The encrypted key is capable of deciphering data stored on the nonvolatile storage device *so as to ensure that the software is installed only on a computer system manufactured by the computer system manufacturer.* The one or more *configuration files contain computer system information.* The computer system information includes *manufacturer specific identification information identifying the computer system manufacturer.*

Kubota discloses a microprocessor which provides copy protection. The microprocessor includes an integrated decoding circuit having a unique cryptographic code for providing copy protection of protected computer software (Kubota, Col. 2, lines 62 – 65.) When a microprocessor is manufactured, a key associated with an ID of the microprocessor is embedded into the decoder. (Kubota, Col 3, line 67 – Col. 4, line 1.) When copy protection of software is desired, the software is encrypted to function uniquely with the microprocessor. (Kubota, Abst.)

More specifically, Kubota sets forth:

The integrated circuit microprocessor chip of the present invention has integrated within it a deciphering code and a decoding circuit to decode the cryptographically protected software. For each individual chip a unique key (or code) is embedded as part of the decoding circuit during the fabrication of the chip. This key operates to decipher the coded software. Computer software which is to be copy protected is cryptographically coded such that only a unique key can decipher the software. That is, the computer software is coded according to the key value of a particular chip and can operate properly only with the chip having that key. Therefore, there is a one-to-one relationship between a copy protected computer software and a given microprocessor.

In operation, when the software is to be obtained by the computer user, the user must identify to the supplier of the software the identification of the user's specific microprocessor. An identification number (ID) is attributed to each microprocessor.

Once the software provider is given an ID, the software supplier will then encrypt the software according to the code associated with that ID. Then this software is provided to the user. When the copy protected software is accessed by the appropriate microprocessor having that ID, the key provides the correct deciphering. However, if the key value is incorrect, indicating that the software is not intended for that microprocessor, then the correct deciphering cannot occur. (Kubota, Col., 3, lines, 22 – 50.)

When discussing Applicant's arguments, the examiner set forth:

Applicants' arguments filed 23 December 2003 have been fully considered but they are not persuasive. Applicants' argument that the Kubota references does not disclose installing software onto a computer system wherein the computer system contains manufacturer specific identification information identifying the computer system manufacturer, and using a key to ensure the software is installed only on a computer system manufactured by the computer system manufacturer because Kubota discloses a system for providing copy protection wherein a microprocessor is encrypted with a unique code (configuration file) during its manufacture (manufactured by a computer system manufacturer, identifying the computer system manufacturer). A software package is encrypted to function uniquely with a particular microprocessor such that only the unique cryptographic code in the microprocessor (identification information) can decipher it (read configuration file, ensure that the software is installed only on a computer system manufactured by the computer system manufacturer) (Abstract, Col. 2, lines 1 – 45). (Final Office Action, Page 2).

Kubota discloses and relates solely to microprocessors. Kubota does not provide any disclosure relating to computer systems, much less to identifying a particular computer system manufacturer. Applicants respectfully submit that providing manufacturer specific identification information identifying a computer system manufacturer is patentably distinct from uniquely identifying a particular microprocessor as disclosed in Kubota. Accordingly, Kubota does not teach or suggest all of the claim limitations of the claimed invention. (See M.P.E.P. 2143.03.)

More specifically, Kubota, taken alone or in combination, does not teach or suggest a method of selectively *installing software onto a computer system manufactured by a computer system manufacturer*, much less such a method which includes reading a configuration file that contains computer system information including *manufacturer specific identification information identifying the computer system manufacturer*, or using a key so as to ensure that the software is installed *only on a computer system manufactured by the computer system manufacturer*, all as required by independent claim 1. Accordingly, claim 1 is allowable over Kubota. Claims 2 – 9 and 24 depend from claim 1 and are allowable for at least this reason.

Kubota, taken alone or in combination, does not teach or suggest *a computer system for selectively installing software where the computer system is manufactured by a computer system manufacturer*, much less such a computer system which includes a computer program which is capable of reading a configuration file stored in the nonvolatile memory and determining an encrypted key from one or more bytes read from the configuration file and the encrypted key is capable of deciphering data stored on the nonvolatile storage device *so as to ensure that the software is installed only on a computer system manufactured by the computer system manufacturer* and wherein one or more configuration files contains computer system information which computer system information includes manufacturer specific identification information identifying the computer system manufacturer, all as required by claim 10. Accordingly, claim 10 is allowable over Kubota. Claims 11 – 17 and 25 depend from claim 10 and are allowable for at least this reason.

Claims 18, 20 and 22 are allowable over Kubota and Patterson

Independent claims 18, 20 and 22 stand rejected under 35 U.S.C. 103(a) over Kubota in view of Patterson, U.S. Patent No. 6,389,541 (Patterson).

In the Final Office Action, the examiner sets forth:

Claims 4, 8, 12, 16, 18, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota, U.S. Patent No. 5,034,980 in view of Patterson, U.S. Patent No. 6,389,541. Referring to claims 4, 8, 12, 16, 20, and 22, Kubota discloses a system for providing copy protection wherein a microprocessor is encrypted with a unique code (configuration file) during its manufacture (manufactured by a computer system manufacturer, identifying the computer system manufacturer). A software package is encrypted to function uniquely with a particular microprocessor such that only the unique cryptographic code in the microprocessor (identification information) can decipher it (read configuration file, ensure that the software is installed only on a computer system manufactured by the computer system manufacturer) (Abstract, Col. 2, lines 1 – 45). Microprocessor also has means to store software information on floppy disks and hard disks (non-volatile storage) (Col. 1, lines 15 – 63). Kubota does not disclose storing the key in a registry file that is stored on a nonvolatile storage device. Patterson discloses a system to regulate access to digital content where on the Windows Operating System a registry file is used to store the unique coded key (Col. 3, lines 54 – 56), and the use of CD-ROM (Col. 3, lines 39 – 41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to store the key taken from the configuration file in Kubota in a registry file in order to lock the installed object to that particular machine as taught in Patterson (Col. 3, lines 56-63). (Final Office Action, Page 6).

Kubota is discussed above.

Patterson discloses a method for regulating access to digital content such as text video and music. The content is stored as part of a compressed and encrypted data file at a client computer. The content is inaccessible to the user until a use authorization occurs. The data file is activated and locked to the particular client computer. The data file is not accessible without new authorization if the data file is transferred to another computer.

The present invention, as set forth by independent claim 18, relates to a method of selectively installing software onto *a computer system manufactured by a computer system manufacturer*. The method includes reading *a configuration file that contains computer system information*, determining a key from one or more bytes from the configuration file including manufacturer specific information, and storing the key in a registry file. The computer system information includes *the manufacturer specific identification information identifying the computer system manufacturer*.

The present invention, as set forth by independent claim 20, relates to a computer readable medium for selectively installing software onto *a computer system manufactured by a computer system manufacturer*. The computer readable medium includes means for reading *a configuration file that contains computer system information*, means for determining a key from one or more bytes from the configuration file including manufacturer specific information, and means for storing the key in a registry. The *computer system information* includes the *manufacturer specific identification information identifying the computer system manufacturer*.

The present invention, as set forth by independent claim 22, relates to *a computer system* for selectively installing software onto *a computer system manufactured by a computer system manufacturer*. The computer system includes means for reading *a configuration file that contains computer system information*, means for determining a key from one or more bytes from *the configuration file including manufacturer specific information*, and means for storing the key in a registry. The *computer system information* includes *the manufacturer specific identification information identifying the computer system manufacturer*.

When discussing Applicant's arguments, the examiner set forth:

Applicant's argument that the Kubota and Patterson reference does not teach storing the key in a registry file is not persuasive because Patterson discloses a system to regulate access to digital content where on the Windows Operating System a registry file is used to store the unique coded key (Col. 3, lines 54 – 56), and the use of CD-ROM (Col. 3, lines 39-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to store the key taken from the configuration file in Kubota in a registry file in order to lock the installed object to that particular machine as taught in Patterson (Col. 3, lines 56 – 63). (Final Office Action Pages 2 – 3)

As discussed above, Kubota discloses and relates solely to microprocessors. Kubota does not provide any disclosure relating to computer systems, much less to identifying a particular computer system manufacturer. Applicants respectfully submit that providing manufacturer specific identification information identifying a computer system manufacturer is patentably distinct from uniquely identifying a particular microprocessor as disclosed in Kubota. The deficiencies of Kubota are realized with Patterson. As will Kubota, Patterson provides no disclosure relating to providing manufacturer specific information identifying a computer system manufacturer, as substantially required by claims 18, 20 and 22. Accordingly, claims 18, 20 and 22 are allowable over Kubota and Patterson.

More specifically, Kubota and Patterson, taken alone or in combination, does not teach or suggest a method of *selectively installing software onto a computer system manufactured by a computer system manufacturer*, much less such a method which includes reading a configuration file that *contains computer system information which includes manufacturer specific identification information*, determining a key from one or more bytes from *the configuration file including the manufacturer specific information identifying the computer system manufacturer*, and storing the key in a registry file, all as required by claim 18. Accordingly, claim 18 is allowable over Kubota and Patterson. Claims 19 and 26 depend from claim 18 and are allowable for at least this reason.

Kubota and Patterson, taken alone or in combination, do not teach or suggest a computer readable medium for *selectively installing software onto a computer system manufactured by a computer system manufacturer* which includes means for reading a configuration file that contains *computer system information which includes manufacturer specific identification information*, means for determining a key from one or more bytes from *the configuration file including the manufacturer specific information identifying the computer system manufacturer*,

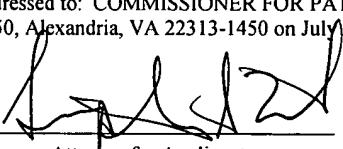
and means for storing the key in a registry, all as required by claim 20. Accordingly, claim 20 is allowable over Kubota and Patterson. Claims 21 and 27 depend from claim 20 and are allowable for at least this reason.

Kubota, and Patterson, taken alone or in combination, do not teach or suggest *a computer system for selectively installing software onto a computer system manufactured by a computer system manufacturer* which includes means for reading a configuration file that contains computer system information *which includes manufacturer specific identification information identifying the computer system manufacturer*, means for determining a key from one or more bytes from *the configuration file including the manufacturer specific information*, and means for storing the key in a registry, all as required by claim 22. Accordingly, claim 22 is allowable over Kubota, and Patterson. Claim 28 depends from claim 22 and is allowable for at least this reason.

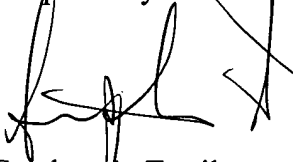
IX. CONCLUSION

For the above reasons, Applicant respectfully submits that rejection of pending Claims 1 - 28 is unfounded. Accordingly, Applicant requests that the rejection of claims 1 - 28 be reversed.

This paper is submitted in triplicate.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: COMMISSIONER FOR PATENTS, P.O. Box 1450, Alexandria, VA 22313-1450 on July 20, 2004.	
	7/20/04
Attorney for Applicant	Date of Signature

Respectfully submitted,


Stephen A. Terrile
Attorney for Applicant
Reg. No. 32,946

APPENDIX "A"

1. A method of selectively installing software onto a computer system manufactured by a computer system manufacturer, said method comprising:
 - reading a configuration file that contains computer system information, the computer system information including manufacturer specific identification information identifying the computer system manufacturer;
 - determining an encrypted key from one or more bytes from the configuration file including the manufacturer specific identification information;
 - deciphering data stored on a nonvolatile storage device using the key so as to ensure that the software is installed only on a computer system manufactured by the computer system manufacturer.
2. The method, as recited in claim 1, wherein the configuration file includes a BIOS memory file.
3. The method, as recited in claim 2, wherein the BIOS memory file is stored in nonvolatile memory connected to the computer system.
4. The method, as recited in claim 1, further comprising:
 - storing the key in a registry file.
5. The method, as recited in claim 1, further comprising:
 - copying the deciphered data onto another nonvolatile storage device connected to the computer system.
6. The method, as recited in claim 1, further comprising:
 - checking the authenticity of the key.
7. The method, as recited in claim 1, wherein the reading and the determining are performed by a software program stored in a dynamic linked library.

8. The method, as recited in claim 1, wherein the nonvolatile storage device includes:

a CD-ROM device; and
a CD-ROM.

9. The method, as recited in claim 1, wherein the nonvolatile storage device stores the data on a Web Page that is accessible on a global computer network.

10. A computer system for selectively installing software, the computer system being manufactured by a computer system manufacturer, the computer system comprising:

a processor;
nonvolatile memory operatively coupled to the processor;
a nonvolatile storage device;
one or more configuration files, the one or more configuration files containing computer system information, the computer system information including manufacturer specific identification information identifying the computer system manufacturer;
a computer program executable by the processor, wherein the computer program is capable of reading a configuration file stored in the nonvolatile memory, determining an encrypted key from one or more bytes read from the configuration file including the manufacturer specific identification information;
wherein the encrypted key is capable of deciphering data stored on the nonvolatile storage device so as to ensure that the software is installed only on a computer system manufactured by the computer system manufacturer.

11. The computer system, as recited in claim 10, wherein the configuration file includes a BIOS memory file.

12. The computer system, as recited in claim 10, further comprising:
a second nonvolatile storage device; and
a registry file stored on the second nonvolatile storage device;
wherein the encrypted key is stored in the registry.

13. The computer system, as recited in claim 10, further comprising:
a second nonvolatile storage device that stores the deciphered data.
14. The computer system, as recited in claim 10, wherein the computer software is further capable of checking the authenticity of the encrypted key.
15. The computer system, as recited in claim 10, wherein the software program is located in a dynamic linked library.
16. The computer system, as recited in claim 10, wherein the nonvolatile storage device includes:
a CD-ROM device; and
a CD-ROM.
17. The computer system, as recited in claim 10, wherein the nonvolatile storage device stores the data on a Web Page that is accessible on a global computer network.
18. A method of selectively installing software onto a computer system manufactured by a computer system manufacturer, said method comprising:
reading a configuration file that contains computer system information, the computer system information including manufacturer specific identification information
identifying the computer system manufacturer;
determining a key from one or more bytes from the configuration file including
manufacturer specific information;
storing the key in a registry file.
19. The computer readable medium, as recited in claim 18, wherein the configuration file includes a BIOS memory file.
20. A computer readable medium for selectively installing software onto a computer system manufactured by a computer system manufacturer, the computer readable medium comprising:

means for reading a configuration file that contains computer system information, the computer system information including manufacturer specific identification information identifying the computer system manufacturer;

means for determining a key from one or more bytes from the configuration file including the manufacturer specific identification information;

means for storing the key in a registry.

21. The computer readable medium, as recited in claim 20, wherein the configuration file includes a BIOS memory file.

22. A computer system for selectively installing software onto a computer system manufactured by a computer system manufacturer, the computer system comprising:

means for reading a configuration file that contains computer system information, the computer system information including manufacturer specific identification information identifying the computer system manufacturer;

means for determining a key from one or more bytes from the configuration file including the manufacturer specific identification information;

means for storing the key in a registry.

23. A method of installing software onto a computer system manufactured by a computer system manufacturer after a sale of the computer system, the computer system including computer system information including manufacturer specific identification information identifying the computer system manufacturer, said method comprising:

providing encrypted data and an unencrypted setup program to the computer system, the encrypted data including software application files;

reading a configuration file that contains the computer system information via the unencrypted setup program;

determining an encrypted key from one or more bytes from the configuration file including the manufacturer specific identification information;

deciphering the encrypted data stored using the encrypted key so as to ensure that the

software application files are installed only on a computer system manufactured by the computer system manufacturer.

24. The method of selectively installing software of claim 1 wherein the reading, determining and deciphering are performed via a setup program.
25. The computer system of claim 10 wherein the computer program includes a setup program, the setup program performing the reading and determining.
26. The method of selectively installing software of claim 18 wherein the reading, determining and deciphering are performed via a setup program.
27. The computer readable medium of claim 20 further comprising a setup program, the setup program including the means for reading the configuration file and the means for determining the key.
28. The computer system of claim 22 further comprising a setup program, the setup program including the means for reading the configuration file and the means for determining the key.